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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/697,779	10/30/2003	Bruce Edward Hoffman	2437/SPRI.106553	8893
32423 7590 04/03/2009 SPRINT COMMUNICATIONS COMPANY L.P. 6391 SPRINT PARKWAY KSOPHT0101-Z2100 OVERLAND PARK, KS 66251-2100				
EXAMINER				
WASEL, MOHAMED A				
ART UNIT		PAPER NUMBER		
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/697,779

Applicant(s)

HOFFMAN ET AL.

Examiner

MOHAMED WASEL

Art Unit

2454

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 October 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-31 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-31 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SF/ICE)
Paper No(s)/Mail Date 1/7/08, 8/14/08 & 3/2/09
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

This action is responsive to application filed on October 30, 2003. Claims 1-31 are presented for examination.

Abstract

Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. **It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.**

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 20-31 are rejected under 35 U.S.C 101 because the claimed invention is directed to non-statutory subject matter.

As per claim 20, the claim is directed to at least one machine readable media, which would have been reasonably interpreted as software alone (*see specification, paragraph [0082]*) and thus lack the necessary physical articles or objects to constitute a machine or a manufacture within the meaning of 101. It is clearly not a series of steps or acts to be a process nor is it a combination of chemical compounds to be a composition of matter. As such, it fails to fall within a statutory category. It is, at best, functional descriptive material per se. Applicant is advised to direct the claim language to a tangible physical media within the meaning of 101 such as hard disk, CD-ROM or the like to overcome the 101 rejection.

Claims 21-31 are rejected under the same rationale as independent claim 20 due to their

dependency.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

Claims 1-31 are rejected under 35 U.S.C. 102(e) as being anticipated by McKinnon, III et al (McKinnon) US Patent Application Pub. No. 2009/0070454.

1. As per claim 1, McKinnon teaches a system for establishing a connection through a carrier virtual network (**Paragraph [0007]**), the carrier virtual network comprising layer one resources dedicated from at least one dedicating telecommunication network to the carrier virtual network that may be accessed by at least one accessing telecommunication network (**Paragraph [0043]**), the system comprising:

a carrier virtual network manager, (**Paragraph [0101]**) comprising:

a database of connection information regarding the layer one resources dedicated to the carrier virtual network, the connection information describing how a telecommunication connection may be established using the layer one resources dedicated to the carrier virtual network (**Paragraph [0104], [0107]**);

a database of latency information for the layer one resources dedicated to the carrier virtual network, the latency information describing the latency associated with each layer one resources dedicated to the carrier virtual network (**Paragraph [0106]**);

a routing system to identify possible connections using the layer one resources dedicated to the carrier virtual network that would establish a connection required by a telecommunication order (**Paragraph [0092]**);

a query system to determine the total latency of an identified possible connection and to determine whether the total latency of an identified possible connection exceeds service latency level requirements of the telecommunication order (**Paragraph [0109]**);

a provisioning system to establish connections within the carrier virtual network (**Paragraph [0186]**); and

at least one dedicated connection between the carrier virtual network manager and the manager of each of the at least one dedicating telecommunication network, the at least one dedicated connection being used to transmit latency information and connection information for the layer one resources dedicated to the carrier virtual network from the network system manager to the carrier virtual network manager for inclusion in the database of connection information and the database of latency information (**Paragraph [0109], [0191]**).

2. As per claim 2, McKinnon teaches the system further comprising: a carrier virtual network interface that receives connection information and latency information from the manager of each of the at least one telecommunication network with layer one resources dedicated to the carrier virtual network via the at least one connection and inputs the connection information and the latency information to the carrier virtual network manager for inclusion in the database of connection information and the database of latency information (**Paragraph [0104]**).

3. As per claim 3, McKinnon teaches the system wherein the database of connection information comprises:

information identifying the available layer one resources of the accessing telecommunication network dedicated to the carrier virtual network (**Paragraph [0032]**); and

information identifying the layer one resources dedicated from the at least one dedicating telecommunication network to the carrier virtual network (**Paragraph [0191]**).

4. As per claim 4, McKinnon teaches the system, wherein the database of latency information comprises:

latency information for each of the available layer one resources of the accessing telecommunication network (**Paragraph [0106]**); and

latency information for each of the layer one resources dedicated from the at least one dedicating telecommunication network to the carrier virtual network (**Paragraph [0191]**).

5. As per claim 5, McKinnon teaches the system, wherein the database of connection information further comprises:

information identifying each of the at least one network connection between the layer one resources of the accessing telecommunication network and the layer one resources dedicated from the at least one dedicating telecommunication network to the carrier virtual network (**Paragraph [0109]**).

6. As per claim 6, McKinnon teaches the system, wherein the database of latency information comprises:

latency information for each of the available layer one resources of the accessing telecommunication network (**Paragraph [0106]**);

latency information for each of the layer one resources dedicated from the at least one dedicating telecommunication network to the carrier virtual network (**Paragraph [0191]**); and

latency information for each of the at least one network connection between the layer one resources of the accessing telecommunication network and the layer one resources dedicated from the at least one dedicating telecommunication network to the carrier virtual network (**Paragraph [0191]**).

7. As per claim 7, McKinnon teaches a method for establishing a telecommunication connection through a carrier virtual network (**Paragraph [0007]**) within the service level latency requirements of a telecommunication service order, the carrier virtual network comprising layer one resources dedicated from at least one dedicating telecommunication network to the carrier virtual network that may be accessed by another telecommunication network (**Paragraph [0043]**), the method comprising:

maintaining a database of connection information regarding the layer one resources available to the carrier virtual network (**Paragraph [0104]**, **[0107]**);

maintaining a database of latency information for the layer one resources available to the carrier virtual network (**Paragraph [0106]**);

receiving connection information for the layer one resources available to the carrier virtual network into the database of connection information (**Paragraph [0104]**);

receiving latency information or the layer one resources available to the carrier virtual network into the database of latency information (**Paragraph [0191]**);

identifying connections using layer one resources available to the carrier virtual network that would fulfill the telecommunication service order using the database of connection information (**Paragraph [0107]**);

determining which of the identified connections meet the latency requirements of the telecommunication service order using the database of latency information (**Paragraph [0104]**);

and provisioning an identified connection that meets the latency requirements of the telecommunication service order (**Paragraph [0186]**).

8. As per claim 8, McKinnon teaches the method for establishing a telecommunication connection, wherein maintaining a database of connection information regarding the layer one resources available to the carrier virtual network comprises:

maintaining connection information for the layer one resources dedicated to the carrier virtual network from the at least one dedicating telecommunication network (**Paragraph [0104]**); and

updating the connection information for the layer one resources dedicated to the carrier virtual network when new connection information is received (**Paragraph [0171]**).

9. As per claim 9, McKinnon teaches the method for establishing a telecommunication connection, wherein maintaining a database of connection information regarding the layer one resources available to the carrier virtual network further comprises:

maintaining connection information for the layer one resources of the accessing telecommunication network (**Paragraph [0104], [0107]**); and

updating the connection information for the layer one resources of the accessing telecommunication network when new connection information is received (**Paragraph [0171]**).

10. As per claim 10, McKinnon teaches the method for establishing a telecommunication connection, wherein maintaining a database of latency information for the layer one resources available to the carrier virtual network comprises:

maintaining latency information for the layer one resources dedicated to the carrier virtual network from at least one dedicating telecommunication network (**Paragraph [0191]**); and

updating the latency information for the layer one resources dedicated to the carrier virtual network when new latency information is received (**Paragraph [0181]**).

11. As per claim 11, McKinnon teaches the method of establishing a telecommunication connection, wherein maintaining a database of latency information for the layer one resources available to the carrier virtual network comprises:

maintaining latency information for the layer one resources dedicated to the carrier virtual network from at least one dedicating telecommunication network (**Paragraph [0191]**);

maintaining latency information for the layer one resources of the accessing telecommunication network (**Paragraph [0106]**);

updating the latency information for the layer one resources dedicated to the carrier virtual network from the at least one dedicating telecommunication network when new latency information is received (**Paragraph [0181]**); and

updating the latency information for the layer one resources of the accessing telecommunication network when new latency information is received (**Paragraph [0171]**).

12. As per claim 12, McKinnon teaches the method for establishing a telecommunication connection, wherein maintaining a database of connection information for the layer one resources available to the carrier virtual network further comprises: maintaining connection information regarding the network connections between the layer one resources of the accessing telecommunication network and the layer one resources dedicated to the carrier virtual network from the at least one dedicating telecommunication network (**Paragraph [0104]**).

13. As per claim 13, McKinnon teaches the method for establishing a telecommunication connection, wherein maintaining a database of latency information for the layer one resources available to the carrier virtual network further comprises:

maintaining latency information for network connections between the layer one resources of the accessing telecommunication network and the layer one resources dedicated to the carrier virtual network from the at least one dedicating telecommunication network (**Paragraph [0191]**).

14. As per claim 14, McKinnon teaches the method for establishing a telecommunication connection, further comprising:

receiving notice if a provisioned connection is impaired (**Paragraph [0106]**);

identifying alternative connections using the layer one resources available to the carrier virtual network that would fulfill the telecommunication service order using the database of connection information (**Paragraph [0059]**);

determining which of the identified alternative connections meet the service level latency requirements of the telecommunication service order using the database of latency information (**Paragraph [0109]**); and

re-provisioning the impaired connection to one of the identified alternative connections that meet the service level latency requirements of the telecommunication service order (**Paragraph [0186]**).

15. As per claim 15, McKinnon teaches the method for establishing a telecommunication connection, further comprising:

receiving notice if a provisioned connection is impaired (**Paragraph [0106]**);

identifying alternative connections using the layer one resources available to the carrier virtual network that would fulfill the telecommunication service order using the database of connection information (**Paragraph [0059]**);

determining which of the identified alternative connections meet the service level latency requirements of the telecommunication service order using the database of latency information (**Paragraph [0109]**); and

re-provisioning the impaired connection to one of the identified alternative connections that meet the service level latency requirements of the telecommunication service order (**Paragraph [0186]**).

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16. As per claim 16, McKinnon teaches the method for establishing a telecommunication connection, wherein identifying alternative connections occurs prior to provisioning an identified connection (**Paragraph [0110]**).
17. As per claim 17, McKinnon teaches the method for establishing a telecommunication connection, wherein determining which of the identified alternative connections meet the latency requirements occurs prior to provisioning an identified connection (**Paragraph [0191]**).
18. As per claim 18, McKinnon teaches the method for establishing a telecommunication connection, wherein identifying alternative connections occurs simultaneous with identifying connections (**Paragraph [0106]**).
19. As per claim 19, McKinnon teaches the method for establishing a telecommunication connection, wherein determining which of the identified alternative connections meet the latency requirements occurs simultaneous with determining which of the identified connections meet the latency requirements (**Paragraph [0181]**).
20. The set of claims 20-23 are rejected under the set of claims 7-10.
21. Claim 24 is rejected under the same rationale as claim 12.
22. Claim 25 is rejected under the same rationale as claim 13.
23. The set of claims 26-30 are rejected under the set of claims 15-19.
24. Claim 31 is rejected under the same rationale as claim 14.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Please refer to form PTO-892 (Notice of Reference Cited) for a list of relevant prior art.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mohamed Wasel whose telephone number is (571) 272-2669. The examiner can normally be reached on Mon-Fri (8:00 am - 5:30 pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nathan Flynn can be reached on (571) 272-1915. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free)? If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Mohamed Wasel/
Patent Examiner, Art Unit 2454
March 25, 2009

/Nathan J. Flynn/
Supervisory Patent Examiner, Art Unit 2454